

L Number	Hits	Search Text	DB	Time stamp
1	228	((propylene polypropylene) with (crystalline crystallinity)) and (softening adj (point temperature)) and (shrink shrinkable shrinkability)	USPAT; EPO; JPO; DERWENT	2003/06/22 14:40
2	356	((propylene polypropylene) with (crystalline crystallinity)) and ((softening adj (point temperature)) (glass adj transition)) and (shrink shrinkable shrinkability)	USPAT; EPO; JPO; DERWENT	2003/06/22 14:41
3	36	((propylene polypropylene) with (crystalline crystallinity)) same ((softening adj (point temperature)) (glass adj transition)) same (shrink shrinkable shrinkability shrinkage)	USPAT; EPO; JPO; DERWENT	2003/06/22 14:41
4	6	("3278646"   "3663488"   "3773609"   "4230767"   "4869938"   "4927885").PN.	USPAT	2003/06/22 15:05
5	1	5079273.URPN.	USPAT	2003/06/22 15:10

DERWENT-ACC-NO: 1988-309716

DERWENT-WEEK: 198844

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TITLE: Polyolefin resin compsn. for packing bottles - with high  
heat shrinkage and good adhesion, comprising  
ethylene!-propylene! copolymer, petroleum resin and  
aluminium benzoate

INVENTOR: NAGAYASU, I; TUCHIYA, K ; WAKITA, K

PATENT-ASSIGNEE: UBE IND LTD[UBEI]

PRIORITY-DATA: 1987JP-0103083 (April 28, 1987)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
GB 2204048 A	November 2, 1988	N/A	015	N/A
DE 3812731 A	November 10, 1988	N/A	000	N/A
DE 3812731 C2	June 9, 1993	N/A	007	C08L 023/16
GB 2204048 B	April 3, 1991	N/A	000	N/A
JP 63268743 A	November 7, 1988	N/A	000	N/A
JP 94051808 B2	July 6, 1994	N/A	004	C08J 005/18

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
GB 2204048A	N/A	1988GB-0010058	April 28, 1988
DE 3812731A	N/A	1988DE-3812731	April 16, 1988
DE 3812731C2	N/A	1988DE-3812731	April 16, 1988
JP 63268743A	N/A	1987JP-0103083	April 28, 1987
JP 94051808B2	N/A	1987JP-0103083	April 28, 1987
JP 94051808B2	Based on	JP 63268743	N/A

INT-CL (IPC): B29C055/04, B29C061/06, B29D007/01, B29K023:00,  
B29K105:02, B29L007:00, B65D065/38, C08J005/18, C08K003/24,  
C08K003/34, C08K005/09, C08L023/08, C08L023/16, C08L057/02

ABSTRACTED-PUB-NO: DE 3812731C

BASIC-ABSTRACT:

Polyolefin resin compsn. for packaging film comprises: (A) 49.5-98.99 wt.% crystalline ethylene-propylene random copolymer (i) or terpolymer (ii); (B) 1-50 wt.% (opt. hydrogenated) petroleum resin; (C) 0.01-0.5 wt.% metal salt of a carboxylic acid or  $\text{MgSiO}_3$ . Film thickness pref. = 30-120 micron, shrinkage at 100 deg.C, pref. = at least 20%. Mfr. of film is claimed. Pref. (A) (i) contains 0.5-10 wt.% ethylene, (ii) contains 0.1-10 wt.% ethylene, 80-99.8 wt.% propylene and 0.1-10 wt.% pentene-1 or esp. butene-1. Melt index of (i) or (ii) pref. = 0.1-30g/10 mins. (230 deg.C, 2-16 Kg). Pref. 70-95 wt.% (A) is used. (B) pref. has softening temp. = 80-150 deg.C. In (C), carboxylic acid salt is pref. Na, Ba or esp. Al benzoate and particle dia. = 20 micron or less.

USE/ADVANTAGE - Heat shrinkable film for packing brittle articles, esp. bottles, has high shrinkage at moderate temp. and good long term adhesion to the article's surface.

ABSTRACTED-PUB-NO: GB 2204048A

EQUIVALENT-ABSTRACTS:

A packaging film consists of, wt.%, (A) 49.5-99.9 polyolefin resin of crystalline either (a) ethene (E)/propene (P) copolymer contg. 0.5-10 E or (b) E/P/other alpha-olefin contg. 0.1-10 E, 80-99.8P and 0.1-10 other alpha-olefin; both having a melt index 0.1-30 g/10 min (ASTM D-1,238,230 deg.C, 2,160 g load), (B) 1-50 (hydrogenated) petroleum resin softening at 80-150 deg.C and C) 0.01-0.5 nucleating agent of particle size below 20 microns and being as known a metal carboxylate or Mg silicate. The film shrinks by at least 20% at 100 deg.C.

Al, Na or Ba benzoate is pref. used as nucleating agent. The molten, extruded and cooled to solidification sheet of resin is oriented in 1 direction to obtain a 30-120 microns thick film.

USE/ADVANTAGE - For shrink wrapping brittle bottles. The film has a high shrink capacity on heating to a relatively low temp. and good adhesive powers. Adhesion is maintained over long periods without loss of quality of the film.

GB 2204048B

A packing film composed of a polyolefin resin composition, said polyolefin

resin composition comprising: (A) 49.5% to 98.99% by weight of a polyolefin resin comprising at least one member selected from the group consisting of crystalline ethylene-propylene random copolymers and crystalline ethylene-propylene- other alpha-olefin terpolymers; (B) 1% to 50% by weight of an additional resin comprising at least one member selected from the group consisting of petroleum resins and hydrogenated petroleum resins; (C) 0.01% to 0.5% by weight of a crystal nucleating agent comprising at least one member selected from the group consisting of metal salts of organic carboxylic acids and magnesium silicate; and (D) 0 to 30% by weight based on the weight of polyolefin resin component (A) of an olefin rubber material, the packing film having a heat shrinkage of 20% or more at a temperature of 100 deg.

C.

CHOSEN-DRAWING: Dwg.0/0 Dwg.0/0

TITLE-TERMS: POLYOLEFIN RESIN COMPOSITION PACK BOTTLE HIGH HEAT SHRINK ADHESIVE

COMPRISE POLYETHYLENE POLYPROPYLENE COPOLYMER PETROL  
RESIN  
ALUMINIUM BENZOATE

DERWENT-CLASS: A17 A92 E12 Q34

CPI-CODES: A03-C04; A04-G06; A07-A01A; A08-M01C; A09-A01A; A12-P01A;  
A12-S06D;  
E05-A; E05-B; E10-C04C; E31-P05B;

CHEMICAL-CODES:

Chemical Indexing M3 \*01\*

Fragmentation Code

A100 A111 A200 A256 A313 A960 C710 G010 G020 G021

G030 G040 G050 G100 G553 G563 J0 J011 J1 J131

J151 J171 M210 M211 M212 M213 M214 M215 M216 M220

M221 M222 M223 M224 M225 M226 M231 M232 M233 M262

M280 M281 M320 M411 M414 M415 M416 M510 M520 M530

M531 M540 M541 M620 M630 M782 M903 M904 Q130 R043

Markush Compounds

198844-B5401-M

Registry Numbers

3102R 1678D

Chemical Indexing M3 \*02\*

Fragmentation Code

A212 A940 B114 B701 B712 B720 B831 C108 C802 C803  
C804 C805 C807 M411 M782 M903 M904 M910 Q130 R043

Specific Compounds

01541M

Registry Numbers

3102R 1678D

UNLINKED-DERWENT-REGISTRY-NUMBERS: 1541U; 1541U

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0037 0205 0218 0042 0057 0066 0069 0231 3151 3320 2011 2307 2325  
2332 2413 2414 2452 2453 3235 2467 3225 3240 2514 2517 2518 2542 2544 2562 2601  
2640 2654 3252 2667 2671 2779 0241 3153 0250 0242 0251 0258 0272

Multipunch Codes: 014 034 04- 040 041 046 047 050 06- 075 09- 15- 18& 19- 20-  
229 231 248 259 27& 303 331 368 381 392 393 394 395 415 428 429 435 437 447 450  
451 452 456 463 479 494 497 499 505 512 514 53& 54& 541 547 57& 575 577 58&  
59&  
596 597 600 604 608 014 034 04- 040 041 046 047 050 051 06- 075 09- 15- 18& 19-  
20- 229 231 248 259 28& 303 331 368 381 392 393 394 395 415 428 429 435 437 447  
450 451 452 456 463 479 494 497 499 505 512 514 53& 54& 541 547 57& 575 577 58&  
59& 596 597 600 604 608 698

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1988-136907

PAT-NO: JP362004735A

DOCUMENT-IDENTIFIER: JP 62004735 A

TITLE: HIGHLY SHRINKABLE POLYOLEFIN FILM

PUBN-DATE: January 10, 1987

INVENTOR-INFORMATION:

NAME

WAKITA, KAZUTO

SHIMIZU, YASUO

TAKASAKI, YASUBUMI

ASSIGNEE-INFORMATION:

NAME

COUNTRY

UBE IND LTD

N/A

APPL-NO: JP60143976

APPL-DATE: July 2, 1985

INT-CL (IPC): C08L023/16, B29C061/06 , B29C055/04

US-CL-CURRENT: 264/210.1

ABSTRACT:

PURPOSE: To obtain a highly shrinkable polyolefin film which is applicable to a shrinkable film for packaging a cylindrical body such as a bottle, by uniaxially stretching a non-oriented film obtained by melt-extruding a resin composition comprising crystalline ethylene/propylene random copolymer or crystalline ethylene/propylene/&alpha;-olefin tercopolymer and a petroleum resin.

CONSTITUTION: A non-oriented film is formed by melt-extruding a resin composition obtained by mixing crystalline ethylene/propylene random copolymer or crystalline ethylene/propylene/ $\alpha$ -olefin terpolymer with 1 $\sim$ 50wt%, based on the composition, petroleum resin or hydrogenated product thereof. This film is stretched lengthwise or crosswise to form a highly shrinkable polyolefin film. As said petroleum resin or said hydrogenated product thereof, a resin derived from a petroleum unsaturated hydrocarbon or its hydrogenated product each having a softening point of about 80 $\sim$ 150 $^{\circ}$ C is used.

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